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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,793	04/09/2004	Luc J. Farmer	VPI/03-170 US 9337	
27916 VERTEX PHA	7590 01/08/2008 RMACEUTICALS INC.	•	EXAMINER	
130 WAVERLY STREET CAMBRIDGE, MA 02139-4242			KOSACK, JOSEPH R	
CAMBRIDGE	, MIA 02139-4242	ART UNIT PAPER NUMBER		
			1626	
			MAIL DATE .	DELIVERY MODE .
			01/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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,	·	Application No.	Applicant(s)			
		10/821,793	FARMER ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Joseph Kosack	1626			
Ti Period for R	he MAILING DATE of this communication app eply	ears on the cover sheet with the c	orrespondence address			
A SHOR WHICHE - Extension after SIX (- If NO perio - Failure to Any reply	TENED STATUTORY PERIOD FOR REPLY VER IS LONGER, FROM THE MAILING DA s of time may be available under the provisions of 37 CFR 1.13 6) MONTHS from the mailing date of this communication. od for reply is specified above, the maximum statutory period w reply within the set or extended period for reply will, by statute, received by the Office later than three months after the mailing tent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status		•				
1)⊠ Re	sponsive to communication(s) filed on <u>02 No</u>	ovember 2007.				
2a)∐ Thi	This action is FINAL 2b)⊠ This action is non-final.					
· —	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
clo	sed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition	of Claims	•				
4a) 5)☐ Cla 6)⊠ Cla 7)☐ Cla	nim(s) 40-53 is/are pending in the application of the above claim(s) 46-53 is/are withdraw nim(s) is/are allowed. nim(s) 40-45 is/are rejected. nim(s) is/are objected to. nim(s) are subject to restriction and/or	n from consideration.				
Application	Papers					
10)∏ The App Rep	e specification is objected to by the Examiner of drawing(s) filed on is/are: a) acception acception to the collacement drawing sheet(s) including the correction of the collacement drawing sheet(s) including the correction of the collacement drawing sheet(s) including the correction of the Examiner of the collacement drawing sheet(s) including the correction of the collacement drawing sheet(s) including the correction of the collacement drawing sheet(s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including the correction of the collacement drawing sheet (s) including sheet (s) incl	epted or b) objected to by the liderawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority und	er 35 U.S.C. § 119					
12)	nowledgment is made of a claim for foreign Some * c) None of: Certified copies of the priority documents Certified copies of the priority documents	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)	References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
2) Notice of 3) Information	Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO/SB/08) (s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

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DETAILED ACTION

Claims 40-53 are pending in the instant application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2007 has been entered.

Previous Specification Objections

The disclosure was objected to for containing an indefinite definition of the compounds in the action mailed January 18, 2006. The specification has been corrected and the objection is withdrawn.

Previous Claim Rejections - 35 USC § 112

Claims 1-7, 15-29, 35-38, and 41-45 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's amendments have removed the indefinite subject matter, and the rejection is withdrawn.

Previous Claim Rejections - 35 USC § 103

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Claims 1-7, 15-29, 35-38, and 40-45 were rejected in the action mailed January 18, 2006 under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (*J. Org. Chem.* 1997, 765-770) in view of Babine et al. (WO 02/18369).

Applicant's amendments have removed the obvious subject matter, and the rejection is withdrawn.

Previous Double Patenting Rejections

Claims 1-5, 15-29, 35-38 and 40-45 were provisionally rejected in the action mailed January 18, 2006 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-16, 21-29, and 34 of copending Application No. 10/614,432, now published as US 20040077600 A1, in view of Patani et al. (*Chem. Rev. 1996*, 3147-3176).

Applicant has chosen not to address this rejection, as it is still provisional. The application has not been patented and the rejection remains provisional. The rejections are maintained for claims 40-45. The rejections have been withdrawn from claims 1, 5, and 15-29 in that those claims have been cancelled. Even though this is a provisional rejection, it cannot be removed since the conflicting application has an earlier filing date.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29

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USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 40-45 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-16, 21-29, and 34 of copending Application No. 10/614,432, now published as US 20040077600 A1, in view of Patani et al. (*Chem. Rev. 1996*, 3147-3176).

The instant application cites two specific compounds which fall generally into the

base structure:

where: T is imidizole; R is a bond; V is -

C(O)-; W is

; $R_{9},\,R_{10},\,R_{10^{\prime}}$ are X-Y-Z where X & Y are bonds and Z

is hydrogen; R_9 is X-Y-Z where X & Y are bonds and Z is C_{1-12} aliphatic, C_{3-10} cycloalkyl, or C_{3-10} cycloalkyl- C_{1-12} aliphatic, substituted as defined; and all other substituents are as defined.

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'432 teaches a compound with a base structure:

T
$$\stackrel{\text{N}}{\longrightarrow}$$
 $\stackrel{\text{N}}{\longrightarrow}$ \stackrel

alkyl, alkenyl, or alkynyl optionally substituted with halogen, sulfhydryl or hydroxyl; R^{18} is a bond, A^2 is $-NR^{11}$ -CH(M)-C(O)-; V is NR^{11} , K is C(O), T is imidazole, R^{19} can be H or alkyl substituted with aryl, and all other substituents are as defined.

'432 does not teach a 5-membered ring with N bound to R¹⁸ instead of C to form an amide linkage instead of a ketone linkage.

Patani et al. teach the bioisosteric replacement of an CH group with N by Grimm's Hydride Displacement Law. See page 3148, column 2, lines 12-31.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to take the compound of '432 and modify the the ring CH connected to R¹⁸ using the bioisosteric replacement of Patani et al. with a reasonable expectation of success. The motivation to make the claimed compound derives from the expectation that structurally similar staring materials are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979).

This is a <u>provisional</u> obviousness-type double patenting rejection.

Conclusion

Claims 40-45 are rejected.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 6:30 A.M. until 4:00 P.M. The examiner has every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph M^cKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph Kosack Patent Examiner Art Unit 1626

Joseph K. M[©]Kane Supervisory Patent Examiner Art Unit 1626